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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 6: RDT&E Management Support				R-1 ITEM NOMENCLATURE PE 0605976F: Facility Restoration and Modernization - T&E							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	47.339	54.809	46.327	0.000	46.327	47.073	48.148	49.020	46.560	Continuing	Continuing
6606MC: Facility Restoration and Modernization - T&E	47.339	54.809	46.327	0.000	46.327	47.073	48.148	49.020	46.560	Continuing	Continuing

A. Mission Description and Budget Item Justification

Restoration includes repair and replacement work to restore damaged facilities due to accident or failure attributable to inadequate sustainment, excessive age, or other causes. Modernization includes alteration of facilities to implement a new, higher standard (including regulatory changes), to accommodate new functions, or to replace building components that typically last more than 50 years (such as foundations and structural components). Other tasks associated with facilities operations (such as custodial services, grass cutting, and the provision of central utilities) are not included.

These restoration/modernization funds support the following Air Force test facilities: 46th Test Group (TG) at Holloman AFB, NM, the 46th Test Wing (TW) at Eglin AFB, FL, the Arnold Engineering and Development Center (AEDC) at Arnold AFB, TN and the Air Force Flight Test Center (AFFTC) at Edwards AFB.

Budget Activity Justification:
This program element is in Budget Activity 6, RDT&E Management Support, because it funds the restoration/modernization of the institutional test infrastructure at the Air Force test activities which are included in the Department of Defense (DoD) Major Range and Test Facility Base (MRTFB).

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APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0605976F: Facility Restoration and Modernization - T&E			
BA 6: RDT&E Management Support					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	47.339	52.409	0.000	0.000	0.000
Current President's Budget	47.339	54.809	46.327	0.000	46.327
Total Adjustments	0.000	2.400	46.327	0.000	46.327
• Congressional General Reductions		0.000			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		2.400			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	0.000	0.000	46.327	0.000	46.327
Congressional Add Details (\$ in Millions, and Includes General Reductions)					
Project: 6606MC: Facility Restoration and Modernization - T&E				FY 2009	FY 2010
Congressional Add: Inter-Base Facility Energy Independence (ANG Project).				0.000	2.400
Congressional Add Subtotals for Project: 6606MC				0.000	2.400
Congressional Add Totals for all Projects				0.000	2.400
Change Summary Explanation					
FY10: Congressional Add: \$2.4M for Internal Base Energy Independence (ANG project).					
FY11: The FY2010 President's Budget submittal did not reflect FY 2011 through FY2015. Therefore, explanation of changes between the two budget positions cannot be made in a relevant manner.					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 6: <i>RDT&E Management Support</i>				R-1 ITEM NOMENCLATURE PE 0605976F: <i>Facility Restoration and Modernization - T&E</i>				PROJECT 6606MC: <i>Facility Restoration and Modernization - T&E</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
6606MC: <i>Facility Restoration and Modernization - T&E</i>	47.339	54.809	46.327	0.000	46.327	47.073	48.148	49.020	46.560	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>Restoration includes repair and replacement work to restore damaged facilities due to accident or failure attributable to inadequate sustainment, excessive age, or other causes. Modernization includes alteration of facilities to implement a new, higher standard (including regulatory changes), to accommodate new functions, or to replace building components that typically last more than 50 years (such as foundations and structural components). Other tasks associated with facilities operations (such as custodial services, grass cutting, and the provision of central utilities) are not included.</p> <p>These restoration/modernization funds support the following Air Force test facilities: 46th Test Group (TG) at Holloman AFB, NM, the 46th Test Wing (TW) at Eglin AFB, FL, the Arnold Engineering and Development Center (AEDC) at Arnold AFB, TN and the Air Force Flight Test Center (AFFTC) at Edwards AFB.</p> <p>Budget Activity Justification: This program element is in Budget Activity 6, RDT&E Management Support, because it funds the restoration/modernization of the institutional test infrastructure at the Air Force test activities which are included in the Department of Defense (DoD) Major Range and Test Facility Base (MRTFB).</p>											
B. Accomplishments/Planned Program (\$ in Millions)											
						FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	
MAJOR THRUST: Facility restoration and modernization at the 46 TG.						0.812	0.762	0.462	0.000	0.462	
<i>FY 2009 Accomplishments:</i> In FY 2009: The 46 TG had various test facility restoration/modernization projects. These requirements include but are not limited to the following categories: road repair, HVAC repairs and replacements, roof repairs and replacements, test track repairs, minor construction and infrastructure repairs to include underground power lines.											

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2010 Plans:</i> In FY 2010: The 46 TG has various documented test facility restoration/modernization requirements. These requirements include but are not limited to the following categories: road repair, HVAC repairs and replacements, roof repairs and replacements, test track repairs, minor construction and infrastructure repairs to include underground power lines.</p> <p><i>FY 2011 Base Plans:</i> In FY 2011: The 46 TG has various documented test facility restoration/modernization requirements. These requirements include but are not limited to the following categories: road repair, HVAC repairs and replacements, roof repairs and replacements, test track repairs, minor construction and infrastructure repairs to include underground power lines.</p> <p><i>FY 2011 OCO Plans:</i> In FY 2011 OCO: Not applicable.</p>						
MAJOR THRUST: Facility restoration and modernization at the 46 TW.		2.301	2.270	2.437	0.000	2.437
<p><i>FY 2009 Accomplishments:</i> In FY 2009: The 46 TW had over 200 test facility restoration/modernization projects. These include, but are not limited to, the following categories: range roads, fiber-optic communications grid, roofing, windows, doors, fire protection, erosion control, lightening protection, environmental clean-up, corrosion control, and HVAC. The accomplishments also include minor construction/reconstruction of Eglin Test and Training Range test sites and facilities; evaluation and implementation of storm mitigation efforts to protect critical test sites; fiber optic cable installation and interconnectivity to enhance communications, data transfer, and instrumentation across the range and test facilities.</p> <p><i>FY 2010 Plans:</i> In FY 2010: The 46 TW has documented over 200 test facility restoration/modernization requirements. These include, but are not limited to, the following categories: range roads, fiber-optic</p>						

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
communications grid, roofing, windows, doors, fire protection, erosion control, lightening protection, environmental clean-up, corrosion control, and HVAC. The projects to accomplish also include minor construction/reconstruction of Eglin Test and Training Range test sites and facilities; evaluation and implementation of storm mitigation efforts to protect critical test sites; fiber optic cable installation and interconnectivity to enhance communications, data transfer, and instrumentation across the range and test facilities. FY 2011 Base Plans: In FY 2011: The 46 TW has documented over 200 test facility restoration/modernization requirements. These include, but are not limited to, the following categories: range roads, fiber-optic communications grid, roofing, windows, doors, fire protection, erosion control, lightening protection, environmental clean-up, corrosion control, and HVAC. The projects to accomplish also include minor construction/reconstruction of Eglin Test and Training Range test sites and facilities; evaluation and implementation of storm mitigation efforts to protect critical test sites; fiber optic cable installation and interconnectivity to enhance communications, data transfer, and instrumentation across the range and test facilities. FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
MAJOR THRUST: Facility restoration and modernization at AEDC. FY 2009 Accomplishments: In FY 2009: AEDC revitalized the Engine Test Facilities, Propulsion Wind Tunnels, Von Karman Test Facilities, and Space and Missile chambers located at Arnold AFB, TN, the National Full-Scale Aerodynamic Complex (NFAC) located at NASA Ames Reserach Center, CA, and Tunnel 9 located at White Oak, Maryland. Restored and modernized the supporting plant facilities and performed project specific planning and design. Also included are large-scale projects that directly support engine development, the Joint Strike Fighter program, hypersonic programs, the Missile Defense Agency,		40.092	45.371	39.732	0.000	39.732

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B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
and spacecraft test and evaluation. FY10 includes approximately \$5M for one time R&M projects to support engine testing and wind tunnel analysis. FY 2010 Plans: In FY 2010: AEDC projects continue revitalizing of the Engine Test Facilities, Propulsion Wind Tunnels, Von Karman Test Facilities, and Space and Missile chambers located at Arnold AFB, TN, the National Full-Scale Aerodynamic Complex (NFAC) located at NASA Ames Reserach Center, CA, and Tunnel 9 located at White Oak, Maryland. Projects to restore and modernize the supporting plant facilities and to perform project specific planning and design. Also includes large-scale projects that directly support engine development, the Joint Strike Fighter program, hypersonic programs, the Missile Defense Agency, and spacecraft test and evaluation. FY10 includes approximately \$5M for one time R&M projects to support engine testing and wind tunnel analysis. FY 2011 Base Plans: In FY 2011: AEDC projects continue revitalizing of the Engine Test Facilities, Propulsion Wind Tunnels, Von Karman Test Facilities, and Space and Missile chambers located at Arnold AFB, TN, the National Full-Scale Aerodynamic Complex (NFAC) located at NASA Ames Reserach Center, CA, and Tunnel 9 located at White Oak, Maryland. Projects to restore and modernize the supporting plant facilities and to perform project specific planning and design. Also includes large-scale projects that directly support engine development, the Joint Strike Fighter program, hypersonic programs, the Missile Defense Agency, and spacecraft test and evaluation. FY 2011 OCO Plans: In FY 2011 OCO: Not applicable.						
MAJOR THRUST: Facility restoration and modernization at AFFTC.		4.134	4.006	3.696	0.000	3.696

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B. Accomplishments/Planned Program (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
<p><i>FY 2009 Accomplishments:</i> In FY 2009: AFFTC had test facility restoration/modernization projects for Electronic Warfare, Range, and other T&E facilities include, but are not limited to, roofing, heating & air conditioning, windows, doors, and floors, work area rezoning, transformers and power systems, fire suppression systems, seismic upgrades, and RAM replacement.</p> <p><i>FY 2010 Plans:</i> In FY 2010: AFFTC will continue test facility restoration/modernization projects for Electronic Warfare, Range, and other T&E facilities include, but are not limited to, roofing, heating & air conditioning, windows, doors, and floors, work area rezoning, transformers and power systems, fire suppression systems, seismic upgrades, and RAM replacement.</p> <p><i>FY 2011 Base Plans:</i> In FY 2011: AFFTC will continue test facility restoration/modernization projects for Electronic Warfare, Range, and other T&E facilities include, but are not limited to, roofing, heating & air conditioning, windows, doors, and floors, work area rezoning, transformers and power systems, fire suppression systems, seismic upgrades, and RAM replacement.</p> <p><i>FY 2011 OCO Plans:</i> In FY 2011 OCO: Not applicable.</p>					
Accomplishments/Planned Programs Subtotals	47.339	52.409	46.327	0.000	46.327
	FY 2009	FY 2010			
Congressional Add: Inter-Base Facility Energy Independence (ANG Project).	0.000	2.400			

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B. Accomplishments/Planned Program (\$ in Millions)											
										FY 2009	FY 2010
<i>FY 2009 Accomplishments:</i> In FY 2009: N/A.											
<i>FY 2010 Plans:</i> In FY 2010: Inter-Base Facility Energy Independence (ANG Project).											
Congressional Adds Subtotals										0.000	2.400
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE 0604256F: <i>Threat Simulator Development.</i>	33.951	23.331	21.245	0.000	21.245	22.495	23.337	23.546	22.699	0.000	0.000
• PE 0604759F: <i>Major T&E Investment.</i>	69.898	67.797	61.587	0.000	61.587	62.413	62.553	62.029	61.250	0.000	0.000
• PE 0605807F: <i>Test and Evaluation Support.</i>	756.327	749.756	759.868	0.000	759.868	758.259	732.288	748.855	777.809	0.000	0.000
• PE 0605978F: <i>Facility Sustainment - T&E support.</i>	29.618	29.683	27.579	0.000	27.579	28.046	28.174	28.603	29.038	0.000	0.000
D. Acquisition Strategy Not applicable											
E. Performance Metrics Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

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